

## Case 1647

***Cacatua* Vieillot, 1817 and CACATUINAE Gray, 1840  
(Aves, Psittaciformes): proposed conservation**

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**Abstract.** The purpose of this application is to conserve the generic name *Cacatua* Vieillot, 1817 (family PSITTACIDAE Rafinesque, 1815) and the subfamily name CACATUINAE Gray, 1840. *Cacatua* has wide currency for the white cockatoos of Australasia and the southwest Pacific but is threatened by the little-used senior synonyms *Kakatoe* Cuvier, 1800, *Cacatoes* Duméril, [1805], *Catacus* Rafinesque, 1815 and *Plyctolophus* Vieillot, 1816. It is proposed that these earlier names be suppressed. The subfamily name CACATUINAE Gray, 1840, based on *Cacatua* and universally used for the five or seven genera of the world's cockatoos, is threatened by PLYCTOLOPHINAE Vigors, 1825, which has remained unused. Suppression of *Plyctolophus* will render the name PLYCTOLOPHINAE invalid.

**Keywords.** Nomenclature; taxonomy; Aves; PSITTACIDAE; CACATUINAE; cockatoos; *Cacatua*; *Cacatua alba*; Australasia; southwest Pacific; Indonesia.

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1. Since Salvadori (1891), the generic name *Cacatua* has been adopted almost universally for the white cockatoos of Australasia and the southwest Pacific, as has the family-group name CACATUINAE (OR CACATUIDAE) for cockatoos in general. This group of birds has a high profile in southern hemisphere biogeography and global aviculture and several species have a significant impact on rural industry in Australia. The name *Cacatua* is found in all relevant basic biological references for white-plumaged cockatoos: formal checklists (e.g. Mayr, 1941; Condon, 1975; Wolters, 1975; Beehler & Finch, 1985; White & Bruce, 1986; Sibley & Monroe, 1990; Christidis & Boles, 1994; Schodde in Schodde & Mason, 1997), handbooks and manuals (e.g. Rand & Gilliard, 1967; Forshaw, 1978; Coates, 1985; Schodde & Tidemann, 1986; Higgins & Davies, in press), and field guides (e.g. Beehler, Pratt & Zimmerman, 1986; Simpson & Day, 1995; Pizzey & Knight, 1997; Coates & Bishop, 1997). It is also the name established in national and international legislation for the protection of cockatoos (for example, Garnett, 1992; IUCN and Conservation International (1996) *Red List of Threatened Animals*; World Conservation Monitoring Centre (1996) *Checklist of CITES Species*).

2. The name 'cacatua' was first introduced to ornithological literature in 1760 by Brisson (p. 204, pl. 21) and was there used for a species of *Psittacus* Linnaeus, 1758. The Commission's ruling in Direction 105 (1963) restricted the availability which had been given to Brisson's (1760) generic names in Opinion 37 (1911) and again in Direction 16 (1955), after the Commission recognised Brisson's *Ornithologia* as non-binominal, to those 115 names in Latin which were listed in his *Tabula synoptica* (vol. 1, pp. 24–61); 'cacatua' was not included and is not available as a generic name from Brisson (1760). The first use of *Cacatua* as an available generic name is to be found in Vieillot's account of the cockatoos in the *Nouveau Dictionnaire* (1817, p. 6). By 1817, however, four other names had been published for the white cockatoos (see para. 5 below).

3. In 1964 Mayr, Keast & Serventy proposed (BZN 21: 372–374) that *Cacatua* be conserved as a generic name from Brisson (1760). Members of the Standing Committee on Ornithological Nomenclature (SCON) of the International Ornithological Congress reviewed the case and concluded that conservation of the name from Brisson (1760) would establish a precedent for accepting names not included for genera in the *Tabula synoptica* and that this would lead to instability. In 1965 (BZN 22: 156–161) the SCON revised the original application and proposed that *Cacatua* be taken from Vieillot (1817), and that the four synonyms published between 1760 and 1817 be suppressed. The revised proposal was supported by the original applicants and by the Checklist Committee of the Royal Australasian Ornithological Union (BZN 22: 156, footnote); there was one objection (BZN 23: 6; 1966). The Commission approved (November 1966) the revised application by 19 votes in favour to two against. However, it was subsequently recognised that the citation of *Psittacus albus* Müller, 1776 as the type species of *Cacatua* was invalid because Vieillot (1817) had not included this nominal species in the genus, and no Opinion giving a Commission ruling was ever published. Neither the original application nor the revision dealt with the family-group name for the cockatoos. Conservation of the name *Cacatua* from Vieillot (1817) was again advocated by the SCON at the XX International Ornithological Congress at Christchurch in December 1990.

4. Vieillot (1817) attributed the name *Cacatua* to Brisson; he noted that the only cockatoos known to Brisson were white. In the second half of the 19th century, however, authors (see, for example, Gray, 1870, p. 169; Salvadori, 1891, p. 115; Sharpe, 1900, p. 10) gave Vieillot himself as the author of the generic name. Brisson (1760) had applied the name 'cacatua' to a species of *Psittacus* from the Moluccas; authors accepted the taxonomic species denoted by this unavailable name as the type and recognised *Psittacus albus* Müller, 1776 (p. 76), described from the Molucca islands, as the first available name for the species. Vieillot (1817) had included 12 species in *Cacatua*; among them was (p. 10) *Cacatua cristata* from the Molucca islands, which was stated to be *Psittacus cristatus* 'Latham'. Vieillot applied this name to the 'Kakatoës, des Moluques' illustrated in pl. 263 of Buffon's *Planches enluminées* (cited in Buffon, 1779, p. 92 as 'Le Kakatoës à huppe blanche' with a reference to Brisson, p. 204) and to *Psittacus cristatus* as used by Latham (1790). Both Buffon's (1779) and Latham's (1781, 'Great White Cockatoo') vernacular names refer unambiguously to the white-crested north Moluccan cockatoo known today as *Cacatua alba* (Müller, 1776).

Latham (1790) listed 'cacatua' of Brisson in the synonymy of *P. cristatus*, but he attributed the specific name *cristatus* to Linnaeus (1758, p. 99; 1766, p. 143) wherein *cristatus* is composite and includes yellow-crested cockatoos such as Wallacean *C. sulphurea* (Gmelin, 1788). Vieillot (1817) did not indicate a type species for *Cacatua* but in 1891 Salvadori (p. 115) nominated *P. albus* Müller, 1776, placing (on p. 124) in its synonymy Vieillot's included species *C. cristata* (see above); under Article 69a(v) of the Code this is a valid designation of *Cacatua cristata* Vieillot, 1817 as the type species. Salvadori (1891, p. 124, footnote) recorded the uncertain and composite identity of Linnaeus's *P. cristatus* and noted 'for this reason I think that his name ought to be discarded'. No such uncertainty attaches to the description of *C. cristata* by Vieillot, which matches *C. alba* (Müller, 1776) in all respects. We believe that stability will be served by the suppression of the specific name of *Psittacus cristatus* Linnaeus, 1758, which for more than a century has remained unused for a taxon.

5. There are four synonyms for *Cacatua* earlier than Vieillot (1817), three of which have family-group names based on them (para. 6 below).

(a) *Kakatoe* Cuvier, 1800 (table 2). In 1912 the Commission ruled in Opinion 39 that Cuvier's (1800) generic names were made available by their association with French vernacular names and thus identification by bibliographic reference. Gray (1855, p. 89) adopted *Kakatoe* and designated *Psittacus philippinarum* Gmelin, 1788 (a junior synonym of *P. haematuropygius* Müller, 1776) as the type species. Mathews (1917, pp. 160–164; 1920, p. 81; 1927, p. 312), the Checklist Committee of the Royal Australasian Ornithologists' Union (1926) and Peters (1937, p. 173) adopted *Kakatoe*, and a number of later authors followed Peters, despite *Cacatua* having by then been in wide use for over 100 years. The statement by Wolters (1975, p. 68), reported by Sibley & Monroe (1990, p. 112), that the name *Kakatoe* has been suppressed is incorrect.

(b) *Cacatoes* Duméril, [1805] (pp. 50, 51). Duméril's *Zoologie Analytique*, in which *Cacatoes* appeared as an available name, is commonly quoted as 1806 from its title page (Mathews, 1912, p. 264; 1917, p. 160) but it evidently appeared in late 1805, before 6 December (Mathews, 1925, p. 37; Schodde in Schodde & Mason, 1997, p. 89) and possibly on 14 November (Mathews, 1920, p. 81; 1927, p. 312). Duméril did not include any nominal species in *Cacatoes*, but Frieriep's (1806) translation included the single species *Psittacus cristatus* Linnaeus, 1758 and this is therefore the type species by subsequent monotypy; Mathews's (1912, p. 261) designation of *Psittacus galeritus* Latham, 1790 is invalid. The name *Cacatoes* Duméril was occasionally used, but not in modern times.

(c) *Catacus* Rafinesque, 1815 (p. 64). This name was introduced as a replacement for *Cacatoes* Duméril. It seems likely that the name was misspelled but there is no clear evidence from the work that it is a lapsus and it was not corrected under 'Additions and corrections' (p. 219). To our knowledge the name has not been used.

(d) *Plyctolophus* Vieillot, 1816 (p. 26). Vieillot introduced this name for parrots with folding crests but in 1817 he rejected it as inappropriate for all the newly discovered 'cockatoos' and adopted *Cacatua* (paras. 2 and 4 above). The name was used (sometimes spelt '*Plyctolophus*') by some authors in the 19th century and the early part of the 20th centuries, and a number of new species were described under it (see Salvadori, 1891).

We propose that these four senior synonyms of *Cacatua* Vieillot, 1817 be suppressed.

6. CACATUINAE Gray, 1840 (p. 53) was based on *Cacatua* and is in universal use (see Bock, 1994, p. 140) for the cockatoos at family level or, more usually, as a subfamily of the PSITTACIDAE. The senior name PLYCTOLOPHINAE Vigors, 1825 (p. 41), based on *Plyctolophus* Vieillot, 1816, refers to the same group of birds but has remained unused. Suppression of *Plyctolophus* will render the name PLYCTOLOPHINAE invalid. The family-group names CACATOIDAE Mathews, 1912 (p. 261; based on *Cacatoes* Duméril) and KAKATOEIDAE Mathews, 1916 (p. 8; based on *Kakatoe* Cuvier, 1800 and adopted by Peters, 1937, p. 170) are both junior to CACATUINAE Gray, 1840.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
  - (a) the generic names:
    - (i) *Kakatoe* Cuvier, 1800;
    - (ii) *Cacatoes* Duméril, [1805];
    - (iii) *Catacus* Rafinesque, 1815;
    - (iv) *Plyctolophus* Vieillot, 1816;
  - (b) the specific name *cristatus* Linnaeus, 1758, as published in the binomen *Psittacus cristatus*;
- (2) to place on the Official List of Generic Names in Zoology the name *Cacatua* Vieillot, 1817 (gender: feminine), type species by subsequent designation by Salvadori (1891) *Cacatua cristata* Vieillot, 1817 (a junior subjective synonym of *Psittacus albus* Müller, 1776);
- (3) to place on the Official List of Specific Names in Zoology the name *albus* Müller, 1776, as published in the binomen *Psittacus albus* (senior subjective synonym of the specific name of *Cacatua cristata* Vieillot, 1817, the type species of *Cacatua* Vieillot, 1817);
- (4) to place on the Official List of Family-Group Names in Zoology the name CACATUINAE Gray, 1840 (type genus *Cacatua* Vieillot, 1817);
- (5) to place the following names on the Official Index of Rejected and Invalid Generic Names in Zoology:
  - (a) *Kakatoe* Cuvier, 1800, as suppressed in (1)(a)(i) above;
  - (b) *Cacatoes* Duméril, [1805], as suppressed in (1)(a)(ii) above;
  - (c) *Catacus* Rafinesque, 1815, as suppressed in (1)(a)(iii) above;
  - (d) *Plyctolophus* Vieillot, 1816, as suppressed in (1)(a)(iv) above;
- (6) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *cristatus* Linnaeus, 1758, as published in the binomen *Psittacus cristatus* and as suppressed in (1)(b) above;
- (7) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name PLYCTOLOPHINAE Vigors, 1825 (invalid because the name of the type genus, *Plyctolophus* Vieillot, 1816, has been suppressed in (1)(a)(iv) above).

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